



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,348	01/26/2004	Toshihiko Takasaki	042050	7111

38834 7590 04/25/2006

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP  
1250 CONNECTICUT AVENUE, NW  
SUITE 700  
WASHINGTON, DC 20036

EXAMINER
----------

ZEMEL, IRINA SOPJIA

ART UNIT	PAPER NUMBER
----------	--------------

1711

DATE MAILED: 04/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/763,348

Applicant(s)

TAKASAKI ET AL.

Examiner

Irina S. Zemel

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 11 and 20-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11 and 20-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102/103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 11 and 20-22 are rejected under 35 U.S.C. 102(b) as being anticipated by, or in the alternative, under 35 USC 103(a) as being unpatentable over US Patent 5,492,996 to Dang et al., (hereinafter "Dang").

The rejection stands as per reasons of record. As far as the newly added limitation to the specific hydroxylamine, the reference expressly discloses 2,2-bis(3-amino-4-hydroxyphenyl)hexafluoropropane, the reference does not expressly disclose this compound. However, as discussed in the previous office actions, the claims are directed to the product that is obtained by a process of reacting at least two claimed components. The patentability of the product, again, as discussed in the previous office actions does not depend on the process it is obtained, rather it depends on the product itself. In the instant case, the claimed product is identical to the product disclosed in the reference under formula in column 2, lines 40-58 with R being C<sub>3</sub>F<sub>6</sub> and X being O. Thus, the product disclosed in the reference is indistinguishable from the product claimed in the instant application based on the claimed starting materials. As far as the content of fluorine, the reference does not address this limitation, but from the formula of the polymer, it appears that the atomic content of fluorine falls within the claimed range.

Claims 11 and 20-22 are rejected under 35 U.S.C. 102(b) as being anticipated by, or in the alternative, under 35 USC 103(a) as being unpatentable over US Patent 5,498,784 to Arnold et al., (hereinafter "Arnold").

The rejection stands as per reasons of record. As far as the newly added limitation to the specific hydroxylamine, the reference expressly discloses 2,2-bis(3-amino-4-hydroxyphenyl)hexafluoropropane, the reference does not expressly disclose this compound. However, as discussed in the previous office actions, the claims are directed to the product that is obtained by a process of reacting at least two claimed components. The patentability of the product, again, as discussed in the previous office actions does not depend on the process it is obtained, rather it depends on the product itself. In the instant case, the claimed product is identical to the product disclosed in the reference under formula in column 2, lines 40-52. Thus, the product disclosed in the reference is indistinguishable from the product claimed in the instant application based on the claimed starting materials. As far as the content of fluorine, the reference does not address this limitation, but from the formula of the polymer, it appears that the atomic content of fluorine falls within the claimed range.

### ***Claim Rejections - 35 USC § 103***

Claims 11 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over by US Patent 6,204,356 to Saito et al., (hereinafter "Saito").

The rejection stands as per reasons of record. As far as the newly added limitation to the specific hydroxylamine, Saito specifically uses 2,2-bis(3-amino-4-hydroxyphenyl)hexafluoropropane in illustrative examples and also lists it as the most preferred compound in column 3, lines 12-13. As far as the content of fluorine, the reference does not address this limitation, but from the formulas of the polymers disclosed in all examples 1-5 and, specifically comparative examples 1 and 2, it appears that the atomic content of fluorine falls within the claimed range.

Claims 11 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over General Glass (of record).

The rejection stands as per reasons of record. As far as the newly added limitation to the specific hydroxylamine, the reference expressly discloses 2,2-bis(3-amino-4-hydroxyphenyl)hexafluoropropane, the reference does not expressly disclose this compound. However, as discussed in the previous office actions, the claims are directed to the product that is obtained by a process of reacting at least two claimed components. The patentability of the product, again, as discussed in the previous office actions does not depend on the process it is obtained, rather it depends on the product itself. In the instant case, the claimed product is identical to the product disclosed in the reference under, for example, formula [14] on page 6 as one illustrative example of the preferred embodiments. Thus, the product disclosed in the reference is indistinguishable from the product claimed in the instant application based on the claimed starting materials. As far as the content of fluorine, the reference does not

address this limitation, but from the formula of the polymer, it appears that the atomic content of fluorine falls within the claimed range.

Claims 11-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over by JP 11-322929 to Toyobo Co LTD., (hereinafter "Toyobo") of record.

The rejection stands as per reasons of record. As far as the newly added limitation to the specific hydroxylamine, the reference expressly discloses 2,2-bis(3-amino-4-hydroxyphenyl)hexafluoropropane, the reference does not expressly disclose this compound. However, as discussed in the previous office actions, the claims are directed to the product that is obtained by a process of reacting at least two claimed components. The patentability of the product, again, as discussed in the previous office actions does not depend on the process it is obtained, rather it depends on the product itself. In the instant case, the claimed product is identical to the product disclosed in the reference under, for example, all of the formulas and illustrative examples of the preferred embodiments. Thus, the product disclosed in the reference is indistinguishable from the product claimed in the instant application based on the claimed starting materials. As far as the content of fluorine, the reference does not address this limitation, but from the formula of the polymer, it appears that the atomic content of fluorine falls within the claimed range.

### ***Response to Arguments***

Applicant's arguments filed 2-16-2006 have been fully considered but they are not persuasive. The applicants argue that none of the reference discloses 2,2-bis(3-

Art Unit: 1711

amino-4-hydroxyphenyl)hexafluoropropane as the starting reactant for the claimed poly(benzoxazole). The examiner simply can not agree with this statement. Each of the above cited reference either expressly discloses 2,2-bis(3-amino-4-hydroxyphenyl)hexafluoropropane as the starting hydroxylamine in synthesis of the polybenzazoles, or discloses the final product that is synthesized from somewhat different starting materials, but is indistinguishable from the claimed polymers based on the starting reactants as discussed above for each reference.

The applicants further state that the references do not address the amount of fluorine in the disclosed polymers. While, as discussed above, it may be so, this limitation is inherently met by all of the disclosed polymers as calculated from their formula weights and the amount of F atoms.

The applicants further argue that the references do not disclose that the resins exhibit certain optical transparenence. This argument was discussed in detail in both previous office actions. Simply because a property or an applications is not disclosed in the references, it does not mean that the property is not exhibited by the product or the product is not useful for the intended use. As discussed in the reference office actions, the examiner stated that it is reasonable believed that the disclosed polymers satisfy the claimed characteristics based on close similarity of the disclosed and the claimed polymers and shifted burden to the applicants to provide factual evidence to the contrary. None has been ever presented or discussed by the applicants. Thus, the applicants did not meet their burden to provide factual evidence that the properties of

the disclosed polymers are difference from the claimed properties or that the polymers are unsuitable for the untended use as optical waveguide.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Irina S. Zemel whose telephone number is (571)272-0577. The examiner can normally be reached on Monday-Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571)272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

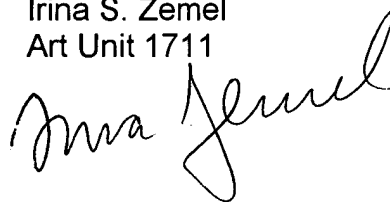


Art Unit: 1711

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ISZ

Irina S. Zemel  
Art Unit 1711

A handwritten signature in cursive script, appearing to read "Irina Zemel", written in black ink.